

gorenje **Stiki**



TG 30 - 200 N

Dear buyer, we thank you for purchase of our product.

Prior to installation and first use of the electric water heater, please carefully read these instructions.

This water heater has been manufactured in compliance with the relevant standards and tested by the relevant authorities as indicated by the Safety Certificate and the Electromagnetic Compatibility Certificate. The technical characteristics of the product are listed on the label affixed between the inlet and outlet pipes. The installation must be carried out by qualified staff. All repairs and maintenance work within the water heater, e.g. lime removal or inspection/replacement of the protective anticorrosion anode, must be carried out by the authorised maintenance service provider.

BUILDING-IN

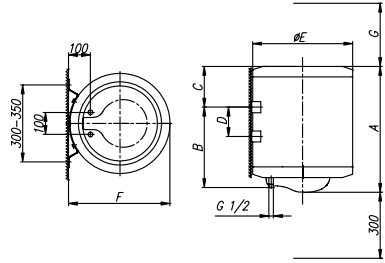
The water heater shall be built-in as close as possible to the outlets. When installing the water heater in a room with bathtub or shower, take into account requirements defined in IEC Standard 60364-7-701 (VDE 0100, Part 701). It has to be fitted to the wall using appropriate rag bolts with minimum diameter of 8 mm. The wall with feeble charging ability must be on the spot where the water heater shall be hanged suitably reinforced. The water heater may be fixed upon the wall only vertically. We recommend the distance between the water heater and the ceiling is large enough to allow simple replacement of the MG anode (see dimension G in the Installation Drawing), in order to avoid unnecessary dismantling of the heater during the servicing intervention.

TECHNICAL PROPERTIES OF THE APPLIANCE

Type	TG 30 N	TG 50 N	TG 80 N	TG 100 N	TG 120 N	TG 150 N	TG 200 N
Model	TG 30 N	TG 50 N	TG 80 N	TG 100 N	TG 120 N	TG 150 N	TG 200 N
Volume [l]	30	50	80	100	120	150	200
Rated pressure [MPa]	0,6						
Weight / Filled with water [kg]	20/50	24/74	30/110	34/134	38/158	44/194	70/270
Anti-corrosion protection of tank	Enameled / Mg Anode						
Connected power [W]	2000						
Voltage [V~]	230						
Heating time to 75°C ¹⁾ [h]	1 ⁰⁵	1 ⁵⁵	3 ⁰⁵	3 ⁵⁵	4 ³⁵	5 ⁴⁵	7 ⁴⁰
Quantity of mixed water at 40°C [l]	50	89	145	200	236	298	399
Energy consumption ²⁾ [kWh/24h]	0,90	1,32	1,85	2,20	2,60	3,20	2,80

- 1) Time for heating of the whole volume of heater with electric immersion heater by entering temperature of cold water from water supply 15°C.
- 2) Energy consumption to maintain stable temperature of water in the water heater 65°C at surrounding temperature 20°C, measured according to DIN 44532.

	A	B	C	D	E	F	G
TG 30 N	459	275	173	-	454	461	80
TG 50 N	561	365	185	-	454	461	130
TG 80 N	766	565	190	-	454	461	180
TG 100 N	926	715	200	-	454	461	260
TG 120 N	1081	865	205	-	454	461	260
TG 150 N	1296	1065	220	-	454	461	260
TG 200 N	1505	1050	444	800	500	507	260



Connection and installation dimensions of the water heater [mm]

CONNECTION TO THE WATER SUPPLY

The water heater connections for the in-flowing and out-flowing water are colour-coded. The connection for the supply of cold water is coloured blue, while the hot water outlet is coloured red.

The water heater may be connected to the water supply in two ways. The closed-circuit pressure system enables several points of use, while the open-circuit gravity system enables a single point of use only. The mixer taps must also be purchased in accordance with the selected installation mode.

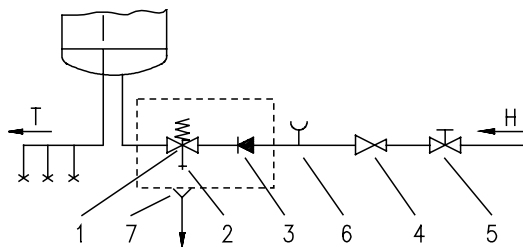
The open-circuit gravity system requires the installation of a non-return valve in order to prevent the water from draining out of the tank in the event of the water supply running dry or being shut down. This installation mode requires the use of an instantaneous mixer tap. As the heating of water expands its volume, this causes the tap to drip. The dripping cannot be stopped by tightening it further; on the contrary, the tightening can only damage the tap.

The closed-circuit pressure system requires the use of pressure mixer taps. For safety reasons the supply pipe must be fitted with a return safety valve or alternatively, a valve of the safety class that prevents the pressure in the tank from exceeding the nominal pressure by more than 0.1 MPa. The outlet opening on the relief valve must be equipped with an outlet for atmospheric pressure.

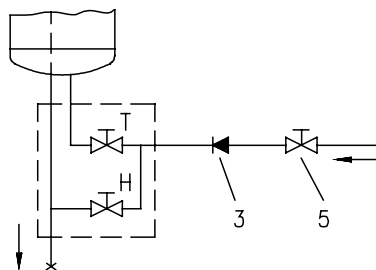
The heating of water in the heater causes the pressure in the tank to increase to the level set by the safety valve. As the water cannot return to the water supply system, this can result in the dripping from the outlet of the safety valve. The drip can be piped to the drain by installing a catching unit just below the safety valve. The drain installed below the safety valve outlet must be piped down vertically and located in the environment that is free from the onset of freezing conditions.

In case the existing plumbing does not enable you to pipe the dripping water from the return safety valve into the drain, you can avoid the dripping by installing a 3-litre expansion tank on the inlet water pipe of the boiler.

In order to provide correct operation of the relief valve, periodical inspections of the relief valve must be carried out by the user. To check the valve, you should open the outlet of the return safety valve by turning the handle or unscrewing the nut of the valve (depending on the type of the valve). The valve is operating properly if the water comes out of the nozzle when the outlet is open.



Closed (pressure) system



Open (non-pressure) system

Legend:

1 - Safety valve

2 - Test valve

3 - Non-return valve

4 - Pressure reduction valve

5 - Closing valve

6 - Checking fitting

7 - Funnel with outlet connection

H - Cold water

T - Hot water

Between the water heater and return safety valve no closing valve may be built-in because with it the function of return safety valve would be impeded.

The water heater may be connected to the water network in the house without reduction valve if the pressure in the network is lower than 0.5 MPa (5 bar). If the pressure exceeds 0.5 MPa (5 bar), a reduction valve must be installed. Prior to the electric connection the water heater must obligatorily be filled with water. By first filling the tap for the hot water upon the mixing tap must be opened. When the heater is filled with water, the water starts to run through the outlet pipe of the mixing tap.

CONNECTION OF THE WATER HEATER TO THE ELECTRIC NETWORK

Before connecting to power supply network, install a power supply cord in the water heater, with a min. diameter of 1,5 mm² (H05VV-F 3G 1,5 mm²). For it the protection plate must be removed from the water heater.

The connection of water heater to the electric network must be performed according to standards for electric installation. Install a disconnect switch (separating all poles from the power supply network) between the water heater and the permanent power connection, in compliance with the national regulations.

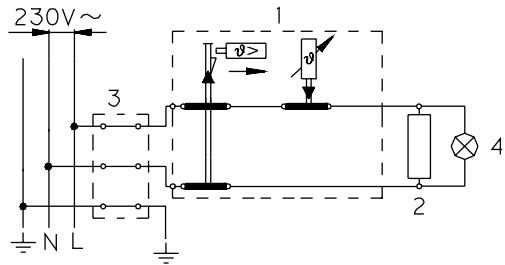
Legend:

- 1 - Thermostat and bipolar thermal fuse
- 2 - Electric heater
- 3 - Connection terminal
- 4 - Pilot lamp

L - Live conductor

N - Neutral conductor

⏏ - Earthing conductor



Electric installation

CAUTION: Prior to each reach in the inner of the water heater it must absolutely be disconnected from the electric network!

USE AND MAINTENANCE

After the connection to water and electric network the water heater is ready for use. Temperature of water in the appliance is automatically controlled by the thermostat which is adjusted by the manufacturer. The adjustment can be modified by turning of the adjustment screw upon the thermostat in the inner of the water heater. The adjustment range reaches between 20°C and 75°C. We do not recommend any change of the manufacturers adjustment, thus this ensures the most economical consumption of electric energy and the smallest excretion of lime-stone. The operation of electric immersion heater is shown by pilot light. On the casing of the water heater a bimetal thermometer is mounted, pointing clockwise (to the right) whenever there is hot water in the water heater.

When the heater shall not be used during a longer time, it must be disconnected from the electric network. At any risk for freezing of water in the water heater, the water must be emptied from it. Water is discharged from the heater via the inlet pipe. To this purpose, a special fitting (T-fitting) shall be mounted between the relief valve and the heater inlet pipe, or a discharge tap. The heater can be discharged directly through the relief valve, by rotating the handle or the rotating valve cap to same position as for checking the operation. Before discharge, make sure the heater is disconnected from the power supply, open the hot water on the connected mixer tap. After discharging through the inlet pipe, there is still some water left in the water heater. The remaining water will be discharged after removing the heating fange, through the heating fange opening.

The external parts of the water heater may be cleaned with a mild detergent solution. Do not use solvents and abrasives.

Regular preventive maintenance inspections ensure faultless performance and long life of your heater. The first of these inspections should be carried out by the authorised maintenance service provider about two years from installation in order to inspect the wear of the protective anticorrosion anode and remove the lime coating and sediment as required. The lime coating and sediment on the walls of the tank and on the heating element is a product of quality, quantity and temperature of water flowing through the water heater. The maintenance service provider shall also issue a condition report and recommend the approximate date of the next inspection.

Never try to repair any possible faults of the water heater by yourself, but inform about it the nearest authorised service workshop.

